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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

of

2

### Complete if Known

Application Number	Not assigned
Filing Date	July 9, 2001
First Named Inventor	RIESS et al
Group Art Unit	Not assigned
Examiner Name	Not assigned
Attorney Docket Number	11927/46002

JC997 U.S. PTO  
09/899852



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### U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
KJM		4,847,797		PICCHI et al	7/11/89
		5,214,875		MUELLER et al	5/25/93
		5,444,712		BETTS et al	8/22/95
		5,533,050		ISARD et al	7/2/96
		5,541,964		COHEN et al	7/30/96
		5,550,924		HELF et al	8/27/96
		5,694,423		LARSSON et al	12/2/97
		5,793,807		WERNER et al	8/11/98
		5,809,074		WERNER et al	9/15/98
		5,825,832		BENEDETTO	10/20/98
		5,835,731		WERNER et al	11/10/98
		5,867,539		KOSLOV	2/2/99
		5,940,440		WERNER et al	8/17/99

### FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

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		Filing Date	July 9, 2001
		First Named Inventor	RIESS et al
		Group Art Unit	Not assigned
		Examiner Name	Not assigned
		Attorney Docket Number	11927/46002
Sheet	2	of	2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
KRM		Kwon et al, "A Blind Equalization with the Variable Decision Region", <i>Pers. Indoor and Mobile R. Comm.</i> , vol. 2, pp 322-326 (Sept. 1997)	
		Lee et al, "A Decision-Directed Blind Equalization with the Error Variance Estimation", vol. 1, pp 99-103, IEEE, (Oct. 1997)	
		Lee et al, "Convergence Analysis of the Stop-and-Go Blind Equalization Algorithm", <i>IEEE Trans. Comm.</i> , vol. 47, no. 2, pp 177-180, (Feb. 1999)	
		Xu et al, "An Improved Decision-Directed Equalization Algorithm for MQAM Modulation", <i>Chinese Journal of Electronics</i> , vol. 9, pp 45-51 (1997)	
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		Lee et al, "Joint Blind Equalization with a Shell Partition-Based CMA for QAM Signal Constellations", <i>IEEE Intl. Conference on Acoustics, Speech, and Signal Processing</i> , IEEE Computer Society Press, pp 2513-2516, (April 21-24, 1997)	
		Tseng et al, "A Stop-and-Go Dual-Mode Algorithm for Blind Equalization", <i>Globecom 96</i> , vol. 2, pp 1427-1431, (November 18-22, 1996)	
		Garth et al, "Blind Equalization Algorithms with Automatic Constellation Phase Recovery for Dual-Mode CAP-QAM Reception", <i>1999 IEEE Intl. Conference on Communications</i> , vol. 3, pp 1531-1536, (June 6-10, 1999)	
		Axford et al, "A Dual-Mode Algorithm for Blind Equalization of QAM Signals: CADAMA", <i>29th Asilomar Conference on Signals, Systems &amp; Computers</i> , vol. 1, pp 172-176, (October 30 - November 1, 1995)	
✓		Weerackody et al, "Dual-Mode Type Algorithms for Blind Equalization", <i>IEEE Transactions on Communications</i> , Vol. 42, no. 1, pp 22-28, (January 1994)	

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

## Complete if Known

Application Number	09/899,852
Filing Date	July 9, 2001
First Named Inventor	RIESS et al
Group Art Unit	2819
Examiner Name	Not assigned
Attorney Docket Number	11927/46002

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
KJM		4,227,152		Godard et al	October 7, 1980

## FOREIGN PATENT DOCUMENTS

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KJM		Jablon, Neil K., "Joint Blind Equalization, Carrier Recovery, and Timing Recovery for High-Order QAM Signal Constellations", <i>IEEE Transactions on Signal Processing</i> , pp. 1383-1397, Vol. 40, No. 6, June 1992	
		Johnson et al, "Blind Equalization Using the Constant Modulus Criterion: A Review", <i>Proceedings of the IEEE</i> , pp. 1927-1950, Vol. 86, No. 10, October 1998	
		Yang et al, "The Multimodulus Blind Equalization Algorithm", 1997 13 <sup>th</sup> Int'l Conference on Digital Signal Processing Proceedings, DSP 97", pp. DSP 97-127 through DSP 97-130, Volume 1 of 2, July 2-4, 1997, Santorini, Hellas (Greece)	
		Treichler et al, "Practical Blind Demodulators for High-Order QAM Signals", <i>Proceedings of the IEEE</i> , Special Issue on Blind Systems Identification and Estimation, edited by R. Liu and L. Tong, pp. 1907-1926, Vol. 86, No. 10, October 1998	
		Gertsman et al, "Symbol-by-Symbol MAP Demodulation of CPM and PSK Signals on Rayleigh Flat-Fading Channels", <i>IEEE Transactions on Communications</i> , pp. 788-799, Vol. 45, No. 7, July 1997	
		Benedetto et al, "A Soft-Input Soft-Output APP Module for Iterative Decoding of Concatenated Codes", <i>IEEE Communications Letters</i> , pp. 22-24, Vol. 1, No. 1, January 1997	
		Kenington, P.B., "Emerging Technologies for Software Radio", <i>Electronics Communication Engineering Journal</i> , pp. 69-83, Vol. 11, No. 2, April 1999	
		Porat et al, "Blind Equalization of Digital Communication Channels Using High-Order Moments", <i>IEEE Transactions on Signal Processing</i> , Vol. 39, No. 2, February 1991	

Examiner  
Signature

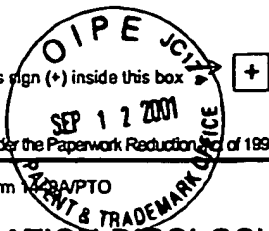
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 2

### Complete if Known

Application Number	09/899,852
Filing Date	July 9, 2001
First Named Inventor	RIESS et al
Group Art Unit	2819
Examiner Name	Not assigned
Attorney Docket Number	11927/46002

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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KNN		Bahl et al, "Optimal Decoding of Linear Codes for Minimizing Symbol Error Rate", <i>IEEE Transactions on Information Theory</i> , pp. 284-287, Vol. IT-20, No. 2, March 1974	
		Sato, Yoichi, "A Method of Self-Recovering Equalization for Multilevel Amplitude-Modulation Systems", <i>IEEE Transactions on Communications</i> , Vol. COM-23, No. 6, June 1975	
		Viterbi et al, <i>Principals of Digital Communication and Coding</i> , Chapter 2, pp. 47-127, McGraw-Hill Book Company, 1979	
		Proakis, John G., <i>Digital Communications</i> , Chapters 5, 6, 10, 11, Third Edition, McGraw-Hill, Inc., 1983	

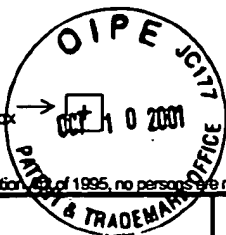
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 1

## Compleat if Known

Application Number	09/899,852
Filing Date	July 9, 2001
First Named Inventor	RIESS et al
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		Number	Kind Code <sup>2</sup> (if known)			

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KLN		Godard, Dominique N., "Self-Recovering Equalization and Carrier Tracking in Two-Dimensional Data Communication Systems", <i>IEEE Transactions on Communications</i> , Vol. Com-28, No. 11, pp. 1867-1875, November 1980	

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Sheet	1	of	1
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		Number	Kind Code <sup>2</sup> (if known)		
K/M		5,818,876		Love	10/06/98
		5,887,035		Molnar	03/23/99
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V		5,742,642		Fertner	04/21/98

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
K/M		EP	0 625 829	A2	AT&T Corp.	11/23/84	
		EP	1 024 631	A1	France Telecom /Telediffusion de France	08/02/00	

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K/M		Kong et al, "Detection of Amplitude-Phase Modulated Signals Over Frequency Nonselective Rayleigh Fading Channels with Adaptive Symbol-Aided Channel Estimation" IEEE Vehicular Technology Conference, Atlanta, Georgia, USA, IEEE, Conf. 46, April 28-May 1, 1996, ISBN 0-7803-3158-3	
		Hoeher, Peter, "TCM on Frequency-Selective Fading Channels: A Comparison of Soft-Output Probabilistic Equalizers", Proceedings of the Global Telecommunications Conference and Exhibition (GLOBECOM), USA, New York, IEEE, December 2, 1990, ISBN 0-87942-632-2	
		Kong et al, "Adaptive MLSE of QAM Signals over Frequency Nonselective Rayleigh Fading Channels", IEE Proceedings: Communications, Great Britain, Institution of Electrical Engineers, Vol. 145, No. 6, December 1998, ISSN 1350-2425	
		Hart et al, "Maximum-Likelihood Synchronization, Equalization, and Sequence Estimation for Unknown Time-Varying Frequency-Selective Rician Channels", IEEE Transactions on Communications, USA, IEEE Inc., New York, Vol. 46, No. 2, February 1, 1998, ISSN 0090-6778	
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